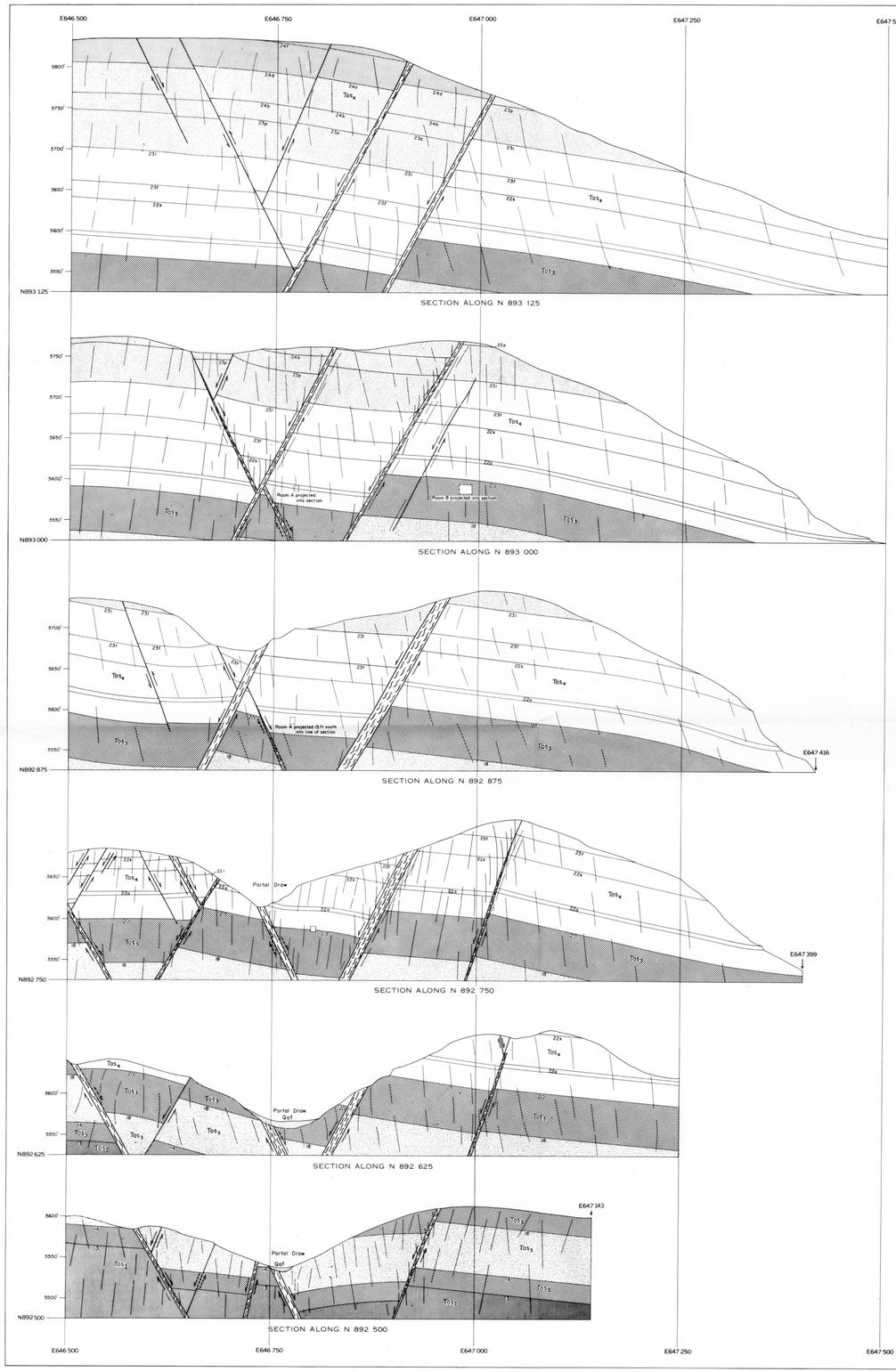
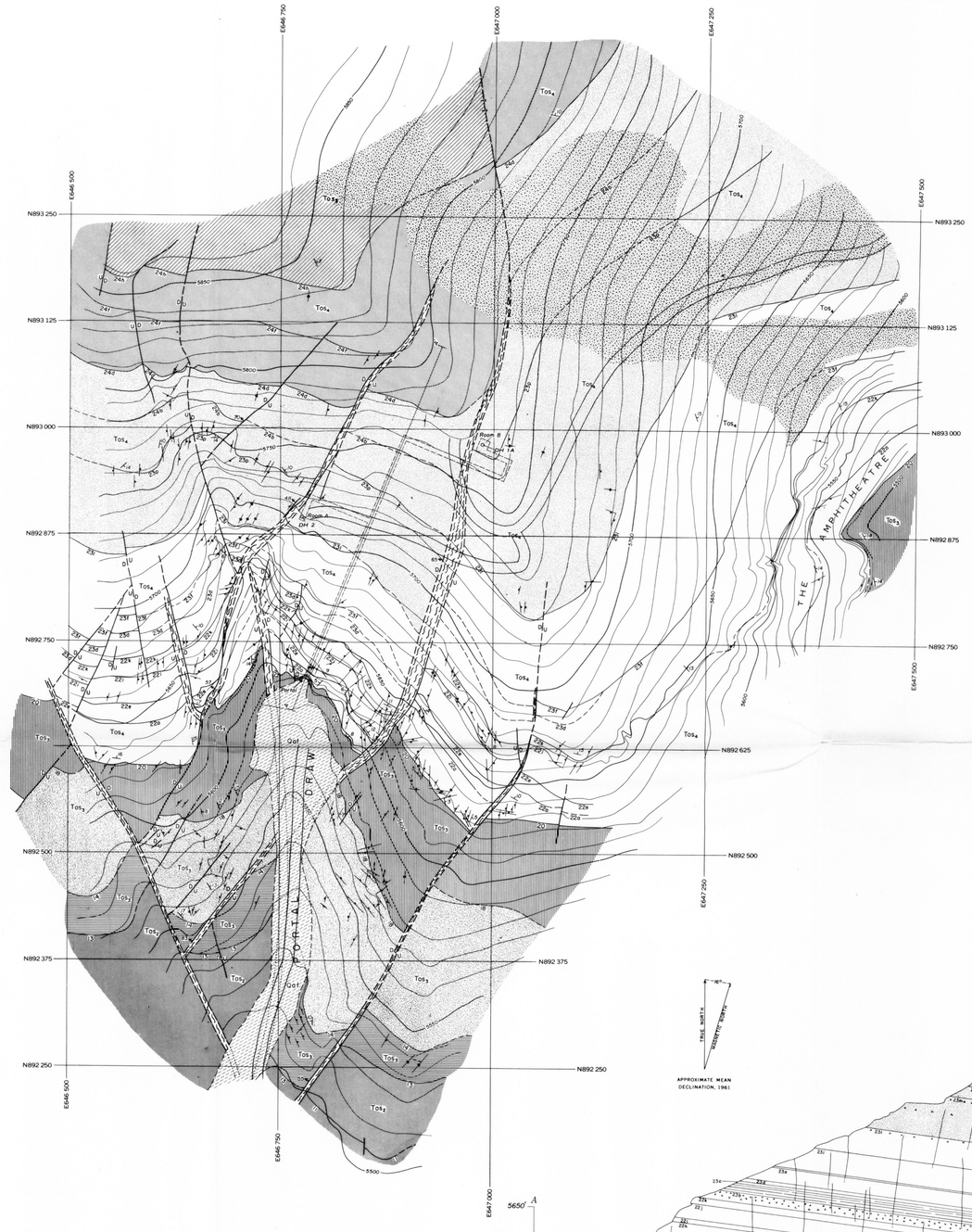




EXPLANATION

Recent

Qaf — Artificial fill and alluvium

QUATERNARY

Tuff

Tuff, bedded, rhyolitic to quartz latitic, pale greenish yellow. Consists chiefly of pumice lapilli. Lower part of unit 5 only.

TERTIARY

Miocene(?) or younger — Oak Spring formation

Unit 4

Tos_4 — Interval containing beds 24a–24h

Tuff, bedded, quartz latite(?) to dacite, light-gray to grayish-brown. Shards and pumice fragments, crystals of plagioclase, alkalic feldspar, biotite, green hornblende and an opaque oxide generally in a fine-grained groundmass. Thin greenish-yellow porcellanitic beds. Mostly poorly exposed and forms sloping bench, but a few beds are dense and are good ledge formers. About 55 feet thick

Tos_4 — Interval containing beds 23m–24d

Tuff, bedded, rhyolitic to quartz latitic, light-gray to brownish-gray except for a few pink and red beds. Abundant ash and pumice fragments ½ to 1 inch long and scattered quartzite fragments as much as 1½ inches long, crystals of alkalic and plagioclase feldspar, quartz, biotite, green hornblende, pyroxene, and an opaque oxide. A few thin yellowish-green porcellanitic beds. Most beds are good ledge formers. About 105 feet thick

Tos_4 — Interval containing beds 21–23L

Tuff, bedded, rhyolitic to quartz latitic, mostly light-gray beds and minor pink beds. Ash, pumice, obsidian, and quartzite fragments (generally smaller than in Unit 6), crystals of alkalic and plagioclase feldspar, quartz, biotite, an opaque oxide and rare pyroxene and titanite. Thin yellowish-green porcellanitic beds fairly common. Most beds are fairly good ledge formers. About 125 feet thick

Unit 3

Tos_3 — Interval containing beds 19–20

Tuff, bedded, rhyolitic to quartz latitic, red, pink, and light-gray beds. Abundant ash and pumice fragments as much as 1 inch long, moderately abundant limonite, obsidian and quartzite fragments. Moderately abundant crystals of alkalic and plagioclase feldspar and quartz, minor biotite, an opaque oxide and amphibole. Upper bed is hard, massive, and a prominent ledge former. About 55 feet thick

Tos_3 — Interval containing beds 15–18

Tuff, bedded, rhyolitic to quartz latitic, mostly light-gray and thin pink bands. Moderately abundant pumice, ash shards and obsidian fragments, scattered quartzite fragments. Moderately abundant to scattered crystals of quartz, alkalic and plagioclase feldspar; scattered biotite and an opaque oxide. Most beds are fairly good ledge formers. About 57 feet thick

Tos_3 — Interval containing bed 14

Tuff, bedded, rhyolitic to quartz latitic; dark brick red at base, pinkish red in middle, and tan at top. Moderate number of pumice, ash shards, and obsidian fragments, scattered quartzite fragments. Moderately abundant crystals of quartz, alkalic and plagioclase feldspar and biotite; scattered limonite blebs. Basal 4 feet is dense, generally massive, and breaks into sharply angular pieces. About 25 feet thick

Unit 2

Tos_2 — Interval containing beds 10–13

Tuff, bedded, rhyolitic to quartz latitic, yellowish-green, light-gray, and red beds. Moderately abundant pumice and ash shard fragments; scattered obsidian and quartzite fragments. Moderately abundant crystals of quartz, alkalic and plagioclase feldspar; scattered biotite and an opaque oxide. Yellowish-green porcellanitic stringers and blebs. Most beds form moderately good ledges. About 27 feet thick

Area covered in most places by more than 2 feet of tuffaceous soil

22a — Contact between surficial deposits and bedrock, between units of Oak Spring formation, or intervals within those units. Numbers correspond to beds shown on columnar section. Dashed where approximately located; dotted where concealed

Fault or fault zone, showing dip. Dashed where approximately located; dotted where concealed. U, upthrown side; D, downthrown side

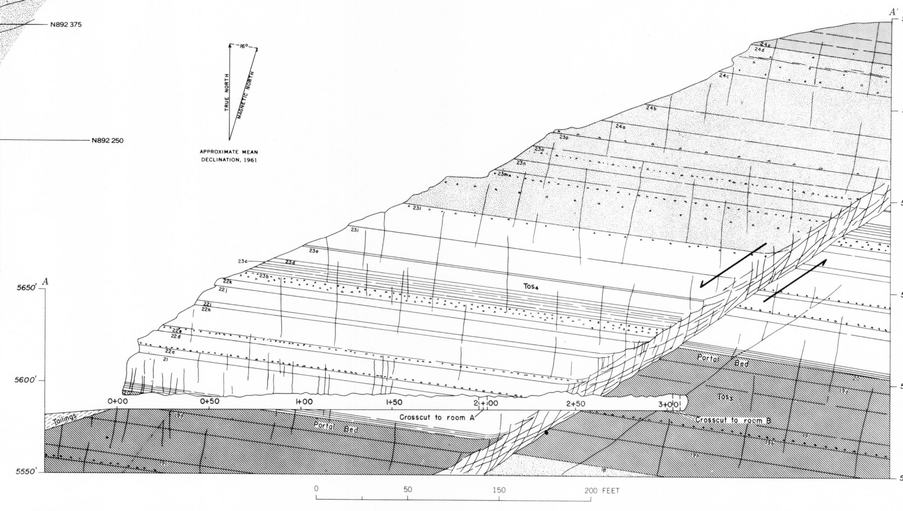
Strike and dip of beds

High-angle joints

Vertical joints

DH 2 — Drill hole

Underground workings



GEOLOGIC MAP AND SECTIONS OF THE USGS TUNNEL AREA, PRIOR TO THE 10- AND 50-TON BLASTS, NEVADA TEST SITE

50 0 50 100 150 200 250 300 350 400 FEET

Mapped by W. R. Hansen, R. W. Lemke, and W. L. Peterson, 1957

654-996 O - 63 (In pocket)